



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,030	03/11/2004	Martin Gerlitz	11885-00031-US	6005

23416 7590 05/24/2006

CONNOLLY BOVE LODGE & HUTZ, LLP
P O BOX 2207
WILMINGTON, DE 19899

EXAMINER

SELLERS, ROBERT E

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 05/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/798,030	Applicant(s) GERLITZ ET AL.	
	Examiner Robert Sellers	Art Unit 1712	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/11 & 12/13/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 1712

1. Claims 1-10 are objected to because of the following informalities: It is unclear whether the further liquid epoxy resin A in claim 1, line 3 is actually intended to be part of the composition since the phrase "if desired" relies upon the intentions of a given user. It cannot be determined whether the filler of claim 7 when silica is intended to be highly disperse silica because the term "especially" does not definitively indicate its presence over silica in general. Appropriate correction is required.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 and 4-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

2. The phrases "selected independently of one another from" in claim 2, line 2 as well as "selected from" in claims 4-7 constitute improper Markush language in the absence of the phrase "selected from the group consisting of."

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1712

Claims 1-6 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Woo et al. Patent No. 5,116,888.

3. Woo et al. (col. 7, Example 1) shows a coating for metal sheet substrates (col. 6, lines 57-60) comprising the polymerization of methacrylic acid, styrene and ethyl acrylate in the presence of a liquid bisphenol A advanced epoxy resin. The polymerization can be conducted without a solvent (col. 4, lines 42-43). The presence of unreacted epoxy resin is acknowledged in column 2, lines 55-57.

Claims 1-6, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 8-188605.

4. Japanese '605 (translation, page 7, Table 1, Example 1) shows the polymerization (CAPLUS abstract) of methacrylic acid, styrene and butyl acrylate in the presence of a liquid epoxy resin with a viscosity of 4000 cps (1 cp = 1 mPa-s).

Claims 1, 2, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 2-187410.

5. Japanese '410 (CAPLUS abstract) shows the polymerization of vinyl chloride I and diallyl phthalate in the presence of a liquid diglycidyl hexahydrophthalate.

Claims 1, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Kato et al. Patent No. 3,875,255.

6. Kato et al. (cols. 6-7, Example 1) show the polymerization of methyl methacrylate in the presence of a liquid glycidyl methacrylate-butyl acrylate-ethylene copolymer.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent No. 5-156204, Great Britain Patent No. 1,073,906 and Japanese Patent Nos. 63-35440 and 8-157506.

7. Japanese '204 (abstracts) sets forth the copolymerization of an acid-functional monomer such as methacrylic acid (CAPLUS abstract and translation, page 4, paragraph 29), a phosphate monomer, and a hydroxyl group-containing monomer in the presence of an aromatic epoxy resin such as a liquid diglycidyl ether of bisphenol A (page 2, paragraphs 9 and 10) and a filler (page 4, paragraph 25, bulking agent).

8. The British patent (page 1, lines 44-64) discloses the copolymerization of an α,β -unsaturated monocarboxylic acid, an α,β -unsaturated monocarboxylic amide and another vinyl compound (page 2, lines 58-72) in the presence of an epoxy resin such as a liquid Epikote 828 (page 2, line 23).

Art Unit: 1712

9. Japanese '440 (CAPLUS abstract) shows the polymerization of methacrylic acid and styrene in the presence of an epoxy resin.

10. Japanese '506 (abstracts) reports a coating (translation, page 4, paragraph 18, line 4) prepared from the polymerization of acrylic acid and a perfluoroalkylated monomer in the presence of an epoxy resin such as a diglycidyl ether of bisphenol A (page 2, paragraph 8, line 4) along with a filler such as silica (page 4, paragraph 18, line 3).

11. Although the claimed epoxy resin in liquid form is not exemplified, the general descriptions of the references embraces liquid epoxy resins such as the low epoxide equivalent weight diglycidyl ethers of bisphenol A such as Epikote 828. It would have been obvious to polymerize the monomers of the Japanese and British patents in the presence of a liquid epoxy resin in order to avoid the use of environmentally hazardous organic solvents by relying on the epoxy resin to act as a solvent and to optimize the curability.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Sellers whose telephone number is (571) 272-1093. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

rs
5/22/2006



ROBERT E.L. SELLERS
PRIMARY EXAMINER